

Research and Special Programs Administration 400 Seventh Street, S.W. Washington, D.C. 20590

JAN 4 2005

DOT-E 14004

EXPIRATION DATE: November 30, 2006

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. <u>GRANTEE</u>: Praxair, Inc. Danbury, CT

2. PURPOSE AND LIMITATION:

- a. This exemption authorizes the transportation in commerce of DOT Specification 105J500W tank cars having a maximum gross weight on rail of 286,000 pounds. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
- b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.203(a) in that marking the exemption number on the shipping paper is waived; and §§ 173.26 and 179.13 in that the authorized maximum gross weight on rail is 286,000 pounds.
- 5. BASIS: This exemption is based on the application of Praxair, Inc. dated October 14, 2004, submitted in accordance with § 107.105, and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Carbon dioxide, refrigerated liquid	2.2	UN2187	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING:

(i) Packaging prescribed are DOT Specification 105J500W tank cars manufactured by Trinity Rail under Certificate of Construction number L046019A and are in accordance with the following drawings:

Trinity Rail Drawing D-41675, General Arrangement Trinity Rail Drawing D-43712, Tank Arrangement Trinity Rail Drawing D-48990-05, Truck Arrangement Trinity Rail Drawing D-54084, Fittings Arrangement

- (ii) Each tank car must conform with the Association of American Railroads Standards and Recommended Practices, Manual C-II, Specification S-286 effective January 1, 2004, and the following requirements:
- 1. Puncture Resistance: AAR TC128 Gr. B, normalized heads and shell at 0.818 inches thick.
- 2. <u>Head Shields</u>: Conforming to the requirements of 49 CFR 179.16.
- 3. Controlling Longitudinal Loadings: The cars will be equipped with a Miner TF-880 draft gear meeting AAR specification M-901-E.
- 4. Structural worthiness: Stub-sill designed and built to a million mile fatigue life, calculated by applying an overall load factor of 1.09 to those designs approved for gross rail loads at 263,000.

- 5. Trackworthiness: The cars are equipped with ASF Motion Control trucks that are approved under AAR Specification M-976.
- 6. Pressure Relief Device: Re-closing pressure relief device designed and tested in accordance with 49 CFR 179.15.
- 7. Service Equipment Protection: Top fitting protection designed to 49 CFR 179.100-12(c) and the Association of American Railroad's Manual of Standards and Recommended Practices, Manual C-III, Appendix E, Paragraph 10.2.
- 8. Capacity: Each tank will have an approximate capacity of 23,000 gallons or less.
- (iii) Each tank car may be loaded to a maximum gross weight on rail not to exceed 286,000 pounds, provided that the tank is not loaded in excess of the amount authorized per § 173.24b.
- b. MARKING Each tank car operating under the terms of this exemption must be marked "DOT-E 14004" in four-inch letters and numerals on a contrasting background above the DOT Specification number.

8. <u>SPECIAL PROVISIONS</u>:

- a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.
- b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.
- c. Transit routes shall be agreed to, in writing, by participating railroads. The written acceptance shall be submitted to the Associate Administrator for Hazardous Materials Safety (AAHMS) at the address specified at the end of this exemption prior to the first offering on each route.
- d. The additional information requirement for shipping papers in § 172.203(a) is waived.

- e. The applicant shall make available its complete maintenance and qualification program to the Federal Railroad Administration upon request (see AAR's Manual of Standards and Recommended Practices, Manual C-111, Recommended Practice RP-263). The maintenance program must incorporate structurally significant items that may be adversely affected by the increase rail load to ensure the continual fitness-for-service of the component based on the inspection method and the inspection interval specified in the maintenance program.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Rail freight.
- 10. MODAL REQUIREMENTS: The Federal Railroad Administration is to be notified if any unusual incident occurs during the movement by contacting:

Federal Railroad Administration Hazardous Materials Division RRS-12, Mail Stop 25 1120 Vermont Avenue, N.W. Washington, D.C. 20590 (202) 493-6229 or 493-6247

- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq</u>:
 - o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the AAHMS as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

Robert A. McGuine

JAN 4 2005

(DATE)

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/exemptions Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: LaValle